

Docket No. AUS9-2000-0720-US1

### ABSTRACT OF THE DISCLOSURE

#### LANGUAGE EXTENSION FOR LIGHT WEIGHT THREADING IN A JVM

An asynchronous execution process to allow a compiler or interpreter to recognize code elements that may be executed out of order and to create a light weight thread for execution of the code element. This light weight thread may be executed on another processor in a multiprocessing environment. An "async" keyword is included in a language to indicate that a statement may be executed asynchronously with respect to the other statements at the same nesting level. The "async" keyword may also be used to modify the declaration of a function to indicate that it is safe to run the affected method out of order with other statements in a block. An "async\_end" keyword is included in a language to indicate that asynchronous execution of a statement, block of code, or method must be complete before the next statement, block of code, or method may be executed.